ASSAP MOPS Group Meeting Minutes #21

The attendees included the following:

Last Name	First Name	Organization
Bachman	Larry	APL
Burns	Bob	FAA TC
Eich	Tom	ACSS
Eftekari	Robert	MITRE/CAASD
Hammer	Jonathan	MITRE/CAASD
Kirk	Dan	MITRE
Miller	Dean	Boeing
Moody	Chris	MITRE
Mosher	Tom	Garmin
Sleight	Randy	FAA/JHU APL
Walker	Don	Honeywell
Wichgers	Joel	Rockwell Collins

The ASSAP MOPS group meeting, on 4 Dec 2007, started at 9 am (Mountain Standard Time).

1. Agenda
    a. Test scenario status (L. Bachman, R. Sleight)
    b. ASSA/FAROA & EV App Performance Evaluations (T. Eich)
    c. Page by page review of the draft ASSAP MOPS document
    d. Surveillance/application processing figure updates (R. Eftekari)
    e. Action Item Log Status
    f. CDTI coordination meeting

2. Test scenario status (L. Bachman, R. Sleight; reference ASSAP-WP21-03, ASSAP-WP21-04)
    a. GPS accuracy error is modeled based on a random walk. **APL** will add a note referencing the type of GPS that was used for their model.
    b. **APL** (Josh) will verify the Baro Altimetry model whether if it provides bias and random jitter.
    c. Should DO-260 (Ver 0) and DO-260A (Ver 1) scenarios be created. The group decided that DO-260A (Ver 1) is sufficient for the scenarios. The only difference is the quality data, NUC versus NIC, NAC, SIL for version 1.
    d. **APL** should consider including a tracker for their TIS-B simulation instead of using the measured radar data.
    e. TIS-B to ADS-B correlation is only required for ownship to prevent ownship shadows. Correlation to prevent traffic shadows with TIS-B and ADS-B is optional. Leave the MITRE algorithm example for traffic TIS-B to ADS-B correlation in the appendix but a test case is not needed since it is only optional.
    f. TIS-B will be simulated out to 175nm or for traffic (line-of-sight) below 24,000 ft.

g. The TCAS module should use a TCAS tracker in-order to replicate TCAS track behavior (specifically lag errors). **APL** will provide MITRE the raw TCAS track data; and **MITRE** will run it through their TCAS model. **MITRE** will provide the required TCAS format/coordinate system to APL for model compatibility. Reference DO-185A Vol 1: 2.2.4.6 Surveillance Tracking Requirement.
h. **APL** will provide all the scenario track data to MITRE within the next two weeks.

3. ASSA/FAROA & EV App Performance Evaluations (T. Eich; reference ASSAP-WP21-05, ASSAP-WP21-06)
    a. The NACp and NIC valid thresholds were agreed for ASSA/FAROA. NACp greater than or equal to 8 and no NIC requirement. Since no NIC is required, no SIL is required. Degraded threshold was changed to a NACp = 7. Horizontal position errors from a NACp of 5 and 6 should not be acceptable for traffic overlaid an airport map.
    b. The EV App performance evaluation did not take into account close proximity of aircraft during parallel approaches. The NIC value was therefore discussed and it was decided to move it from a 5 to a 6. **Tom Eich** will update his paper to justify a NIC of 6.
    c. **Don Walker** will provide issue papers for the changes made for EV Acq. and ASSA/FAROA.
    d. **Tom Eich** will provide an issue paper for the changes made for EV App.
    e. **Jonathan Hammer** will provide an issue paper for the changes made for CD.

4. Page by page review of the draft ASSAP MOPS document (reference latest copy ASSAP-WP21-07)
    a. ASSAP's position is that ASSAP will not resolve duplicate 1090ES addresses. **Jonathan Hammer and Don Walker** will re-state this position at the next plenary.
    b. **Tom Eich** will update Table 2-2 based on the changes made in Table 2-1.
    c. **Chris Moody** will update the application requirement sections based on the threshold changed captured in Table 2-1 and Table 2-2. Also, the parameter names need to be consistent with the parameters used in the I/O section.
    d. Currently, EV Acq maximum age until dropped is 25 seconds based on enroute TIS-B rates but the APL generated tables show 15 seconds will break a 0.5 nm accuracy threshold based on a 1.0g turn (reference ASSAP-WP21-09). **APL** needs to generate new coast tables assuming a 0.5g turn.

5. Surveillance/application processing figure updates (R. Eftekari; reference ASSAP-WP21-08)
    a. Math CAD data will be included as part of the MOPS CD package.

6. Action Item Log Status (did not have time to review).
7. CDTI Coordination Items (WG4B meeting)
    - Assess Completion/Status
        - CDTI Status
            - Review of Section 2.3 will be completed this week
            - Test and Into section are still in work. The CDTI group should use ASSAP's intro as a baseline.
            - Most of the document should be done by the January meeting
            - Ballot for the March meeting is still planned (low risk)
        - ASSAP Status
            - Section 2.2 is completed
            - Completed the review of the main ASSAP requirements
            - Outstanding/Critical Path items are the test scenarios to be completed between APL and MITRE. Then the statistics need to be generated and folded back into the requirements.
            - Comment matrix will be out after the next telecon.
    - Document fusion (any duplicate sections?)
        - The **CDTI group** will send Chris Moody and Janet their sections to incorporate into one document.
    - Flight Test Section
        - Need to ask John Morgan for status
    - Multi-display STP source issue
        - **Action:** An assumption needs to be added stating that the CDTI should use the position sources from ASSAP. A discussion about position sources will be added to the installation section.
    - Review CDTI outputs to ASSAP
        - The **CDTI** group will provide a list of needed ASSAP outputs for the airport map.
    - **Tom** will add requirements in the application sections to address the ASA Application Status output states.
    - **Tom** will add optional requirements for traffic emergency information to be sent to the CDTI.
    - The ASSAP group proposed a heading error of +/- 30 degrees for traffic directionality validation. This can be determined based on speed and reported NACv (reference ASSAP-WP21-10). The CDTI group will verify if this is ok.

8. Future Telecons and Meetings
    a. Next Telecon: 03 Jan 08 (10AM-4PM Eastern Time; Test Status/Review)
    b. Next Group Meetings:
        i. 15-17 Jan 08 at Collins; Melbourne, FL
        ii. 21-23 Apr 08 at RTCA; DC
        iii. 4-7 Mar 08 at RTCA; DC